

This document lists all common Solartron Transducers and link settings for the OD4, OD5 range of electronics.

Every effort will be made to keep this list up to date. If the transducer being used cannot be found then please ask.

The settings given here are a starting point only.

Full instructions for setting up any output and offset are given in the user manual.

Setting a ± 10 V Output

The Course Gain Range indicated in the tables will produce an output just below ± 10 V. For an accurate ± 10 V output, the Fine Gain Control should be adjusted.

Setting a ± 5 V Output

For a ± 5 V fullscale output, select the Course Range one down from that shown in the tables.

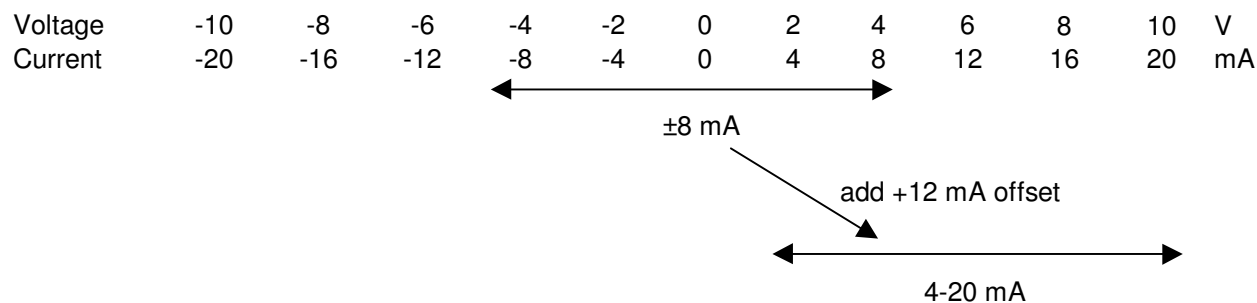
Example: Range 4 will give ± 10 V fullscale; Range 5 will give ± 5 V fullscale (after Fine Gain adjust).

Setting a 4-20 mA Output

The current output and voltage output are related as shown below. Voltage and current are available concurrently.

4-20 mA is the same as a ± 8 mA with a +12 mA offset.

When relating current and voltage, 4-20 mA is the same as a 2 to 10 V span (or ± 4 V with a +6 V offset).



To set 4-20 mA, perform the following steps.

1. Select the Course range setting for ± 5 V (approximately ± 10 mA)
2. Adjust the fine gain control to give ± 8 mA.
3. Add a fixed offset of +10 mA (+VE and 5 V course link).
4. Adjust the fine offset control to give ± 8 mA.

Solartron LVDT Transducers

| | Sensitivity mV/V/mm | ±Range mm | Full Range Output mV | Calibration Load Resistance kΩ | Calibration Frequency kHz |
|-----------------------|------------------------|--------------|----------------------------|--------------------------------------|---------------------------------|
| B-Series | | | | | |
| BS/1.5 | 158 | 1.5 | 711 | 100 | 5 |
| BS/2.5 | 154 | 2.5 | 1155 | 100 | 5 |
| BS/5 | 108 | 5 | 1620 | 100 | 5 |
| BS/7.5 | 48 | 7.5 | 1080 | 100 | 5 |
| BS/10 | 29 | 10 | 870 | 100 | 5 |
| BS/15 | 27 | 15 | 1215 | 100 | 5 |
| BS/25 | 16 | 25 | 1200 | 100 | 5 |
| BS/50 | 10.8 | 50 | 1620 | 100 | 5 |
| BS/75 | 9 | 75 | 2025 | 100 | 5 |
| BS/100 | 8.2 | 100 | 2460 | 100 | 5 |
| BS/125 | 5.9 | 125 | 2212.5 | 100 | 5 |
| Optimum Series | | | | | |
| OP/1.5 | 102 | 1.5 | 459 | 100 | 5 |
| OP/6 | 81 | 6 | 1458 | 100 | 5 |
| OP/12.5 | 72 | 12.5 | 2700 | 100 | 5 |
| OP/1.5+ | 110 | 2.5 | 825 | 100 | 5 |
| OP/6+ | 76 | 8 | 1824 | 100 | 5 |
| OP/12.5+ | 72 | 15 | 3240 | 100 | 5 |
| SM Series | | | | | |
| SM/1 | 147 | 1 | 441 | 100 | 5 |
| SM/3 | 130 | 3 | 1170 | 100 | 5 |
| SM/1+ | 147 | 2 | 882 | 100 | 5 |
| SM/3+ | 130 | 4 | 1560 | 100 | 5 |

| Links | | | |
|--------|---------------------|---------------|----------------------|
| Freq | Input Resistance | Input Gain | Course Gain Range |
| | | | |
| parked | parked | parked | 2 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 2 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 4 |
| parked | parked | parked | 4 |
| parked | parked | parked | 4 |
| | | | |
| parked | parked | parked | 1 |
| parked | parked | parked | 3 |
| parked | parked | DIV2 | 4 |
| parked | parked | parked | 2 |
| parked | parked | parked | 3 |
| parked | parked | DIV2 | 5 |
| | | | |
| parked | parked | parked | 1 |
| parked | parked | parked | 3 |
| parked | parked | parked | 2 |
| parked | parked | parked | 3 |

Solartron LVDT Transducers

| | Sensitivity mV/V/mm | ±Range mm | Full Range Output mV | Calibration Load Resistance kΩ | Calibration Frequency kHz |
|---|------------------------|--------------|----------------------------|--------------------------------------|---------------------------------|
| AC, ACR Range | | | | | |
| AC/15 | 35 | 15 | 1575 | 100 | 5 |
| AC/25 | 2 | 25 | 1500 | 100 | 5 |
| AC/50 | 9.3 | 50 | 1395 | 100 | 5 |
| AC/100 | 5 | 100 | 1500 | 100 | 5 |
| AC/150 | 3.2 | 150 | 1440 | 100 | 5 |
| AC/250 | 2.1 | 250 | 1575 | 100 | 5 |
| AC/300 | 1.7 | 300 | 1530 | 100 | 5 |
| Submersible Range | | | | | |
| SAF(CR)/15 | 34 | 15 | 1530 | 100 | 5 |
| SAF/25 | 20 | 25 | 1500 | 100 | 5 |
| SAF/50 | 9.3 | 50 | 1395 | 100 | 5 |
| AX, AXR, AT, ATR Range. Also BG(R) and MD where ±Range is the same | | | | | |
| AX/0.25 | 272 | 0.25 | 204 | 10 | 5 |
| AX/0.5 | 272 | 0.5 | 408 | 10 | 5 |
| AX/1 | 210 | 1 | 630 | 10 | 5 |
| AX/1.5 | 150 | 1.5 | 675 | 10 | 5 |
| AX/2 | 150 | 2 | 900 | 10 | 5 |
| AX/2.5 | 150 | 2.5 | 1125 | 10 | 5 |
| AX/5 | 105 | 5 | 1575 | 10 | 5 |
| AX/10 | 33 | 10 | 990 | 10 | 5 |
| A6G, M6D1 and AU/1 | | | | | |
| A6G | 269 | 1 | 807 | 10 | 5 |

| Links | | | |
|--------|---------------------|---------------|----------------------|
| Freq | Input Resistance | Input Gain | Course Gain Range |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | parked | parked | 3 |
| parked | 10k* | X2 | 4 |
| parked | 10k* | parked | 1 |
| parked | 10k* | parked | 2 |
| parked | 10k* | parked | 2 |
| parked | 10k* | parked | 1 |
| parked | 10k* | parked | 3 |
| parked | 10k* | parked | 3 |
| parked | 10k* | parked | 4 |
| parked | 10k* | parked | 2 |

* For some transducers, especially standardised types, better performance can sometimes be achieved with 100K load. This is due to interaction between transducer, standardisation components and components needed to meet EMC requirements.

Solartron Half Bridge Transducers

| | Sensitivity mV/V/mm | ±Range mm | Full Range Output mV | Calibration Load Resistance kΩ | Calibration Frequency kHz |
|---|------------------------|--------------|----------------------------|--------------------------------------|---------------------------------|
| AX, AXR, AT, ATR Range. (U) means unstandardised (usually unplugged) | | | | | |
| AX/0.25 | 73.5 | 0.25 | 55 | 2* | 10 |
| AX/0.25(U) | 84 | 0.25 | 63 | 2* | 10 |
| AX/0.5 | 73.5 | 0.5 | 110 | 2* | 10 |
| AX/0.5(U) | 84 | 0.5 | 126 | 2* | 10 |
| AX/1 | 73.5 | 1 | 221 | 2* | 10 |
| AX/1.5 | 49 | 1.5 | 221 | 2* | 10 |
| A6G/1 | 73.5 | 1 | 221 | 2* | 10 |
| AX/10 | 7.35 | 10 | 221 | 2* | 10 |
| AX/2.5 | 29.4 | 2.5 | 221 | 2* | 10 |
| AX/5 | 14.7 | 5 | 221 | 2* | 10 |
| AX/1(U) | 83 | 1 | 249 | 2* | 10 |
| A6G/1(U) | 88 | 1 | 264 | 2* | 10 |
| AX/1.5(U) | 82 | 1.5 | 369 | 2* | 10 |
| AX/2.5(U) | 82 | 2.5 | 615 | 2* | 10 |
| AX/5(U) | 51 | 5 | 765 | 2* | 10 |
| AX/10(U) | 33 | 10 | 990 | 2* | 10 |

| Links | | | |
|-------|---------------------|---------------|----------------------|
| Freq | Input Resistance | Input Gain | Course Gain Range |
| on | 2k* | X4 | 1 |
| on | 2k* | X4 | 1 |
| on | 2k* | X4 | 2 |
| on | 2k* | X4 | 2 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X2 | 1 |
| on | 2k* | X1 (parked) | 1 |
| on | 2k* | X1 (parked) | 2 |
| on | 2k* | X1 (parked) | 2 |
| on | 2k* | X1 (parked) | 2 |

* For some transducers, especially standardised types, better performance can sometimes be achieved with 100K load. This is due to interaction between transducer, standardisation components and components needed to meet EMC requirements.